REMARKS

Prior to entry of this paper, Claims 1-26 were pending. Claim 1-26 were rejected in the Office Action dated March 25, 2008 [Office Action] and in the Advisory Action dated July 21, 2008 [Advisory Action]. In this paper, Claims 27-30 have been added. Accordingly, Claims 1-30 are currently pending. No new matter is added by way of this amendment. For at least the following reasons, Applicants respectfully submit that each of the presently pending claims is in condition for allowance.

Rejections based on Azimi

Claims 1-3, 5-11, 13-24, and 26 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,163,183 to Azimi et al. ("Azimi"). Claims 4, 12, and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Azimi in view of U.S. Patent No. 6,417,704 to Nakajima et al. ("Nakajima"). Each of these rejections is respectfully traversed.

It is respectfully submitted that the rejection to Claim 1 should be withdrawn at least because Azimi fails to disclose, "a comparator circuit that is arranged to provide a trigger signal by comparing a reference signal to a temperature sensor signal," as recited in the applicant's Claim 1. It is respectfully submitted that the signal at reference electrode 24 of Figure 3 of Azimi is a bandgap reference voltage - not a temperature sensor signal. A bandgap reference voltage is substantially independent of temperature and therefore it is not a temperature sensor signal.

The Office Action states that a bandgap reference voltage can be used as a temperature signal. The Office Action further states, "Band gaps depend on temperature because of thermal expansion." (Office Action, page 14).

The applicant's representative respectfully disagrees. A bandgap reference circuit does not output a temperature signal by employing the thermal expansion of a bandgap. Rather, bandgap reference circuits are often referred to as such because they can have an output voltage with a value that is close to the theoretical bandgap of silicon at 0 K. However, the output voltage itself is not dependent on or correlative with any bandgap. Instead, bandgap reference circuits are well known in the art to output a constant voltage that is substantially indepenendent of temperature. In general,

bandgap reference circuits combine one or more circuit elements that produce a proportional to absolute temperature (PTAT) signal with one or more circuit elements that produce a complementary to absolute temperature (CTAT) signal. The PTAT and CTAT signals are combined in such manner so as to to make the resultant bandgap voltage substantantially independent of temperature. (see, e.g., U.S. Reissue Patent No. 30,586 to Brokaw).

It is respectfully submitted that the rejections to Claims 2-12 and 25 should be withdrawn at least because they depend from Claim 1.

It is respectfully submitted that the rejection to Claim 22 should also be withdrawn at least because Azimi fails to disclose "wherein the temperature sensor signal is indicative of a temperature," as presently recited in Claim 22. As discussed above, Azimi's bandgap reference voltage is substantially independent of temperature. Therefore, this voltage cannot be indicative of temperature.

It is respectfully submitted that the rejection to Claim 23 should also be withdrawn at least because Azimi fails to disclose "wherein the temperature sensor signal is proportional to a temperature," as presently recited in Claim 23. As discussed above, Azimi's bandgap reference voltage is substantially independent of temperature. Therefore, this voltage cannot be proportional to a temperature.

It is respectfully submitted that the rejection to Claim 24 should also be withdrawn at least because Azimi fails to disclose "wherein the comparator circuit compares the temperature sensor signal to the reference signal in order to perform a temperature comparison." The Office Action states, "the comparator circuit (20) compares the temperature sensor signal (24) to the reference signal (25) in order to perform a temperature comparison." (Office Action, page 6). The applicant's representative disagrees. The voltage at reference electrode 24 of Figure 3 is Azimi's bandgap reference voltage. As discussed above, this voltage is substantially independent of temperature and therefore it is not a temperature signal. Further, comparator circuit 20 does not perform a temperature comparison. According to Azimi, the circuit of Figure 3 provides undervoltage monitoring and power failure indication. (Azimi, col. 4, lines 20-25). Therefore, the comparator circuit 20 at most performs a comparison to monitor undervoltage or to detect a power failure.

It is respectfully submitted that the rejection to Claim 21 should also be withdrawn at least because Azimi fails to disclose "the comparator trips when the temperature sensed by the temperature sensor signal reaches a pre-determined level," as recited in Claim 21. As discussed above, Azimi's bandgap voltage is substantially independent of temperature and therefore it does not sense temperature. Further, Azimi's comparator circuit 20 does not trip based on a pre-determined level of temperature. As discussed above, Azimi's comparator circuit 20 does not perform a temperature comparison. Rather, it performs a comparison to monitor undervoltage or to detect a power failure.

It is respectfully submitted that the rejection to Claim 25 should also be withdrawn at least because Azimi does not teach or suggest "wherein the hysteresis-and-output-sensor circuit is arranged to provide hysteresis in a range of about 2°C to about 10°C of hysteresis for the temperature comparison when the hysteresis is enabled." The Office Action references case law to state that "since it has been held that where *the general conditions of a claim* are disclosed in the prior art, discovering the optimum workable ranges involves routine skill in the art." (Office Action, page 13; Emphasis added). The applicants' representative respectfully disagrees with the Office Action's application of case law. Here, *the general conditions* of Claim 25 are not disclosed in Azimi because Azimi's comparator circuit 20 does not perform a temperature comparison. Rather, Azimi's comparator circuit 20 performs a comparison to monitor an undervoltage or to detect a power failure. A person skilled in the art would not monitor an undervoltage or detect a power failure using a temperature range of hysteresis. Further, because Azimi's bandgap reference voltage does not significantly vary with temperature, a person skilled in the art would not be able to use Azimi's circuit to derive the temperature range of Claim 25. (In fact, Azimi provides no discussion of temperature whatsoever).

It is respectfully submitted that the rejections to independent Claims 13 and 20 should be withdrawn at least because Azimi fails to disclose, "activating hysterisis if a temperature-sensing condition has occured," as presently recited in Claim 13 and also in Claim 20. The Office Action states "the bandgap voltage sensed via the comparator also senses the a temperature condition and the hysteresis is actived based on that condition." (Office Action, page 14). The applicant's representative respectfully disagrees. As discussed above, Azimi's bandgap circuit does not sense

temperature because Azimi's bandgap reference voltage is substantially independent of temperature. For at least that reason , Azimi cannot not disclose "a temperature-sensing condition" and therefore Azmimi also fails to disclose "activating hysteresis if a temperature-sensing condition has occurred."

Additionally, it is respectfully submitted that the rejections to independent Claims 13 and 20 should be withdrawn at least because Azimi fails to disclose, "ensuring that the hysteresis is automatically inactive when the circuit is powering up".

It is respectfully submitted that the rejections to Claims 14-19 and 26 should be withdrawn at least because they depend from Claim 13.

Additionally, it is respectfully submitted that the rejection to Claim 26 should be withdrawn at least because Azimi does not disclose "activating at least one of a fan or a heater when the output signal is asserted," as presently recited in Claim 26. The Office Action again references case law to state that "it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate *the claimed apparatus* from a prior art apparatus satisfying the claimed structural limitations." (Office Action, page 7; Emphasis added). The applicants' representative respectfully disagrees with the Office Action's application of case law. Claim 26 is a claimed method – not *a claimed apparatus*. Because it is a claimed method, the recited elements of Claim 26 cannot be rejected on the basis of intended use. Rather, to support a rejection under Section 102, each of the recited claim elements of Claim 26 must be found in a single prior art reference.

Rejections based on Lim

Claims 1-3, 5-11, 13-22, 24, and 26 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,614,857 to Lim et al. ("Lim"). Each of the rejections is respectfully traversed.

It is respectfully submitted that the rejection to Claim 1 should be withdrawn at least because Lim fails to disclose, "a comparator circuit that is arranged to provide a trigger signal by comparing a reference signal to a temperature sensor signal," as recited in the applicant's Claim 1.

The Office Action opines that Vin2 is a temperature sensor signal and it is inherent that Vin2 is such because "the temperature of resistor R11 increases as the current through it increase thereby providing a higher voltage Vin2." (Office Action, pages 15-16). The applicant's representative respectfully submits that the Office Action must provide rationale or evidence tending to show inherency. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (MPEP 2112). As is known in the art, some resistors can have a resistance that varies with temperature, while others can have a resistance that does not vary with the temperature. The Office Action provides no rationale or evidence that supports that case that the resistance of resistor R11 varies with temperature.

However, even assuming arguendo that the resistor R11 has a resistance that varies with temperature, a person skilled in the art would not construe voltage signal Vin2 as having a significant temperature dependency. Any increase or decrease in temperature would only result in a slight change to the overall resistance of resistor R11. This slight change would be insignificant and not detectable at OP20 (which receives voltage signal Vin2).

Further, the statement by the Office Action, "the temperature of resistor R11 increases as the current through it increase thereby providing a higher voltage Vin2" (Office Action, pages 15-16), is simply untrue. If the current through a resistor increases, it is the increase in current that causes the voltage to increase (in accordance with Ohm's law, V=IR), not temperature. Further, a resistor has a temperature coefficient that may be either zero, positive, or negative. If a resistor has a zero or negative temperature coefficient, increased temperature would not cause the resistance to increase.

Additionally, it is respectfully submitted that the rejection to Claim 1 should be withdrawn for the following reasons that is independent of the aforementioned reason. It is respectfully submitted that the rejection to Claim 1 should be withdrawn at least because Lim fails to disclose, "a gate circuit that is arranged to provide an output signal by gating a gate input signal subject to control by a gate control signal, wherein the gate input signal is based at least in part on the trigger signal," as recited in the applicant's Claim 1.

The Office Action states, "Because the AND gate AND45 supplies the activation signal and/or the deactivation signal of Q45 which supplies the activation signal to OP20 to make Vout2

available, by a translation relationship AND45 makes Vout2 available, i.e. provides for Vout2 and thus meets the claims language." The Office Action further states, "According to Merriam Webster the definition of provide it "to supply or make available." (Office Action, page 15).

The applicant's representative respectfully disagrees. Even assuming arguendo that the aforementioned definition of *provide* is correct, Lim does not teach that AND gate AND45 "suppl[ies] or make[s] available" Vout2. Rather, Lim indicates that Vout2 is made available by OP20 circuit, which supplies Vout2 based on the outputs of many components, including second voltage generator 10, first threshold voltage generator 41, and second threshold generator 45. Indeed, Vout2 is made available independent of whether AND gate AND45 outputs a signal. For example, if second threshold voltage generator 45 was removed from Lim's Figure 4 (including AND gate AND45), OP20 circuit would continue to make Vout2 available. By contrast, if the gate circuit of Claim 1 was removed from the circuit of Claim 1, the output signal of the gate circuit would no longer be available.

Additionally, it is respectfully submitted that the rejection to Claim 1 should be withdrawn for the following reasons that is independent of the aforementioned reason. It is respectfully submitted that the rejection to Claim 1 should be withdrawn at least because Lim fails to disclose, "the gate control signal is based at least in part on a power-on-reset signal". Voltage Vin1 is not a power-on reset signal. The circuit of Lim does not even have or use a power-on reset signal.

It is respectfully submitted that the rejections to Claims 2, 3, 5-11, 21-22, and 24 should be withdrawn at least because they depend from Claim 1.

It is respectfully submitted that the rejection to Claim 21 should also be withdrawn at least because Lim does not disclose "the comparator trips when the temperature sensed by the temperature sensor signal reaches a pre-determined level," as recited in Claim 21.

As discussed above, the Office Action has not evidenced that the resistance of R11 varies with temperature. However, even assuming arguendo that the resistance across R11 varied with temperature, a person skilled in the art would understand that the resistance variation would be slight and any change it caused in voltage signal Vin2 would be insignificant or undetectable. Therefore, voltage signal Vin2 is incapable of reaching a pre-determined level based on temperature.

It is respectfully submitted that the rejection to Claim 22 should also be withdrawn at least because Lim does not disclose "wherein the temperature sensor signal is indicative of a temperature," as presently recited in Claim 22. As discussed above, even assuming arguendo that the resistance across R11 varied with temperature, any change to voltage signal Vin2 would be insignificant or undetectable. Therefore, voltage signal Vin2 is incapable of being indicative of temperature.

It is respectfully submitted that the rejection to Claim 24 should also be withdrawn at least because Lim does not disclose "wherein the comparator circuit compares the temperature sensor signal to the reference signal in order to perform a temperature comparison." Lim's Figure 4 shows the OP20 circuit receiving voltage signals Vin2 and Vth as inputs. As discussed above, even assuming arguendo that the resistance across R11 varied with temperature, voltage signal Vin2 has an insignificant or undetectable temperature dependence. In addition, voltage signal Vth is not associated with temperature. Therefore, Lim's OP20 circuit cannot perform a temperature comparison by comparing voltage signals Vin2 and Vth.

It is respectfully submitted that the rejections to independent Claims 13 and 20 should be withdrawn at least because Lim fails to disclose, "activating hysterisis if a temperature-sensing condition has occured," as presently recited in Claim 13 and also in Claim 20. The Office Action states "Lim discloses activating hysterisis (via Q41) if a temperature-sensing condition has occured." (Office Action, page 9). The applicant's representative respectfully disagrees. As discussed above, even assuming arguendo that the resistance across R11 varied with temperature, voltage signal Vin2 cannot sense temperature because it would have an insignificant or undetectable temperature dependence. For at least that reason, Lim cannot disclose "a temperature-sensing condition" and therefore Lim also fails to disclose "activating hysterisis if a temperature-sensing condition has occurred."

Additionally, it is respectfully submitted that the rejections to independent Claims 13 and 20 should also be withdrawn for the following reasons that are independent of the aforementioned reason. It is respectfully submitted that the rejection to Claims 13 and 20 should be withdrawn at least because Lim fails to disclose, "ensuring that the hysteresis is automatically inactive when the circuit is powering up," as recited in the applicant's Claim 13 and also in Claim 20. The Office

Action states "[u]nless the comparator 30, meets the predetermined threshold of 30, during power up the hysteresis is inactive, because no signal passes to the hysteresis circuit until the power up condition is met." The applicant's representative respectfully disagrees. Signals do pass to the hysteresis circuit of Lim during power up. The circuit of FIG. 4 of Lim does not have any means of disabling the hysteresis or of otherwise assuring that the hysteresis is inactive when the circuit is powering up.

It is respectfully submitted that the rejections to Claims 14-19 and 26 should be withdrawn at least because they depend from Claim 13.

Additionally, it is respectfully submitted that the rejection to Claim 15 should be withdrawn at least because Lim fails to disclose, "the gate control signal is derived form a power-on-reset signal". The circuit of Lim has no power-on reset signal at all.

Additionally, it is respectfully submitted that the rejection to Claim 26 should be withdrawn at least because Lim does not disclose "activating at least one of a fan or a heater when the output signal is asserted," as presently recited in Claim 26. The Office Action again references case law to state that "it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate *the claimed apparatus* from a prior art apparatus satisfying the claimed structural limitations." (Office Action, page 12; Emphasis added). The applicants' representative respectfully disagrees with the Office Action's application of case law. Claim 26 is a claimed method – not *a claimed apparatus*. Because it is a claimed method, the recited elements of Claim 26 cannot be rejected on the basis of intended use. Rather, to support a rejection under Section 102, each of the recited claim elements of Claim 26 must be found in a single prior art reference.

Response to comments in the Advisory Action

Regarding Applicant's argument regarding the rejection of Claim 1 based on Azimi, the Advisory Action stated, "The signal at 24 [of Azimi] is a temperature sensor signal because in any circuit the temperature varies." Applicants disagree. The temperature may vary, but the signal at 24 varies negligibly with temperature. The entire purpose of a bandgap circuit is that it produces a

bandgap reference voltage that is as invariant with respect to temperature as possible. Extremely minor variations with temperature may still exist, but not enough to make a bandgap reference voltage a temperature sensor signal. The bandgap reference voltage does not sense the temperature. It is almost perfectly independent of temperature. The Advisory Action also states, "The argument of substantially independent of temperature is not persuasive because broadly interpreted substantially independent of temperature can be dependent of temperature depending on the characteristics of what is deemed as substantial and what is not." The Examiner is supposed to use the broadest reasonable interpretation. One of ordinary skill in the art would find the idea of using a bandgap reference voltage as a temperature sensor signal to be absurd. The entire purpose of a bandgap circuit is that it produces a bandgap reference voltage that is as invariant with respect to temperature as possible. Extremely minor temperature dependence still exists, but tha bandgap reference voltage is as independent as temperature as possible. An interpretation under which the bandgap reference is viewed as a temperature sensor signal is not even close to being reasonable.

The Advisory Action further states, "Thermal expansion make [sic] the band gap dependent on temperature." As stated above, this is simply untrue, as is known by one of ordinary skill in the art. A bandgap circuit generates a voltage that is substantially independent of temperature and which is substantially equal to the bandgap voltage of silicon at absolute zero temperature, and generates such a voltage regardless of the actual temperature of the bandgap circuit itself, and regardless of any actual bandgap in the bandgap circuit. Thermal expansion could change the voltage of the bandgap of silicon within the bandgap circuit, but the bandgap circuit would still output a voltage equal to the bandgap of silicon at absolute zero, regardless of the actual temperature or of the actual bandgaps in the bandgap circuit. The bandgap reference voltage output by the bandgap circuit not changed based on thermal expansion of the bandgap. In fact, one of ordinary skill in the art would find such a notion to be absurd. In fact, virtually any elementary electronic textbooks that covers bandgap circuits would make is clear that the bandgap reference voltage output by the bandgap circuit is not affected by thermal expansion of the bandgap. See also U.S. Reissue Patent No. 30,586 to Brokaw.

The Advisory Action also states, "With respect to Claim 23 substantially independent of temperature can be interpreted as dependent of temperature." Claim 23 recites "proportional to

temperature". It is scientific fact that the voltage output by a bandgap circuit is not proportional to temperature. See U.S. Reissue Patent No. 30,586 to Brokaw or any electrical engineer textbook that covers bandgap circuits. Also, the Office seems to regard "proportional to temperature" as equivalent to "dependent on temperature." This is simply not true. "Proportional to temperature" has a specific mathematical meaning and is narrower and more specific than "dependent on temperature".

With regard to Claim 25, the Advisory Action discusses temperature coefficients of resistors, which appears to be a discussion of Lim. However, Claim 25 was not rejected based on Lim, so the Advisory Action appears to be talking about another Claim, possibly the rejection to Claim 1 based on Lim. The temperature coefficients of the resistors of Lim are not specified, and therefore could have a temperature coefficient of zero, in which case there would be no dependency on temperature. Some resistors have non-temperature coefficients, but Lim is silent on this point. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (MPEP 2112). As is known in the art, some resistors can have a resistance that varies with temperature, while others can have a resistance that does not vary with the temperature. Since either is possible, the result or characteristic may occur or be present in the prior art, which is not sufficient to establish inherency. Further, even if resistor R11 of Lim has a non-zero temperature coefficient, it would not cause Vin2 of Lim to be suitable as a temperature sensing signal. Additionally, although Lim is silent with regard to whether resistor R11 has a temperature coefficient of zero or not, a temperature coefficient of zero for resistor R11 would appear to be optimal, since there is no apparent reason that Lim would want Vin2 to vary based on temperature.

In discussing the rejection of Claims 13 and 20 based on Azimi, the Advisory Action states "the discosure of activating hysteresis if a temperature sensing condition has occurred the Examiner points out the bandgap voltage sensed via the comparatoer [sic] senses the temperature condition and the hysteresis is activated based on that condition via feedback loop through 10 and 34". In Azimi, a monitored voltage, such as a battery voltage, is monitored to determine whether the monitered voltage is too low, indicating a power failure. The circuit of Azimi has hysteresis, but the

hysteresis is not based on temperature. The circuit of Azimi does not activate hysteresis based on whether or not a temperature sensing condition has occurred.

The Advisory Action also states, "this is met because anything that gains heat is considered to be a heater." Here, the Office is using a "broadest interpretation" rather than "broadest reasonable interpretation". It is true that any resistor with current passing through it dissipates some heat. But that does not make any resistor with current passing through it a heater! A resistor that does not increase the ambient temperature by a measurable amount could not reasonably be called a heater. Further, even if any resistor could be construed as a heater, in Azimi, the "activation" is this heater is based on the comparison. This alleged "heater" is activated regardless of whether the comparator is tripped or not, so the recitation "activating at least one of a fan or a heater when the output signal is asserted" is not met by Azimi. Azimi does not "activate" the resistor based on whether the output signal is asserted or not. This discussion also applies with regard to the rejection of Claim 26 based on Lim.

The Advisory Action also states, "With respect to applicant's argument concerning lim resistance always varies with temperature." This statement is simply untrue. Resistance does not always vary with temperature. Resistance can vary directly with temperature, inversely with temperature, or not vary based on temperature at all.

The Advisory Action also states, "Whether the variance is significant is not at issue even a slight change can be interpreted as a variance in temperature." It is not clear which claim is referenced here—possibly Claim 1. This is also related to another statement in the Advisory Action, with regard to the rejection of Claim 22 of Lim, "with respect to 22 the temperature sensore [sic] is always indicative of a temperature, rather it is detectable or insignificant is not at iswsue [sic]". The Office takes the position that any signal that varies with temperature, no matter how small, is a temperature sensing signal. Applicant respectfully disagrees. A signal that varies so slightly with temperature that is cannot be measured by currently existing measurement means clearly is not a temperature sensing signal, since the temperature cannot thereby be sensed. Applicant do not understand the Office position that a change being undetectable is not an issue—if something changes so little based on temperature that the change is not even detectable, how could the temperature thereby be sensed? If the change based on temperature is not detected, then the

change is temperature is not sensed. Also, for very small and negligible changes based on temperature, the variance in parts based on temperature is far greater than any variation based on temperature, so as to make such a device unsuitable for temperature sensing. If a given part were to alter a parameter by .00001% based on temperature, but the given part varied on that parameter to 10% from part to part, the variance based on temperature would be negligible by comparison and therefore not be suitable for sensing temperature.

Also, if other factors play a larger role in changing a signal than any negligible change in temperature, then it is not suitable for temperature sensing, for the change in the signal caused by the temperature change could not be distinguished from other factors, therefore making it unsuitable as a temperature sensing signal. For example, the Office takes the position that signal Vin2 of Lim is a temperature sensor signal. Signal Vin2 of Lim is a signal that gradually increases when voltage Vin1 is inputted high and gradually reduced when voltage Vin1 is inputted low. Assuming arguendo that the resistance of R11 of Lim varies based on temperature, that variance is not significant compared with changes in Voltage Vin1. If one attempts to use voltage Vin2 of Lim as a temperature sensor signal, and one notices that Vin2 has just increased—how would one determine whether Vin2 changed based on a change in temperature, or based on a change in Vin1? Even if Vin2 changes based on temperature, the change is negligible compared to changes in Vin2 based on Vin1, and therefore signal Vin2 of Lim cannot be a temperature sensor signal.

With regard to Applicant's arguments regarding the rejection of Claim 21 based on Lim, the Advisory Action states, "With respect to Claim 21 any level is a predetermined leel [sic]". However, in Lim, the comparator does not trip based on the temperature reaching any level, pre-determined or otherwise. Claim 21 recites, "the circuit for temperature sensing is arranged such that the comparator circuit trips when the temperature sensed by the temperature sensor signal reaches a pre-determined level". In Lim, the comparator tripping is not based on the temperature reaching any particular level. The comparator tripping in Lim is based on whether Vin1 is low or high and on the hysteresis operation as illustrated in FIG. 5A-5E, not based on the temperature reaching any particular level. The temperature could remain constant throughout the entire operation of the circuit, and the comparator of Lim would still trip. Therefore, tripping of the comparator of Lim is not based on the temperature reaching a level.

With regard to Applicant's arguments regarding the rejection of Claim 24 based on Lim, the Advisory Action states, "with respecdt [sic] to 24 Bth is associated with temperature because it is associated with the resistance". Claim 24 recites a temperature comparison. The comparison performed in Lim is not a temperature comparison. The comparator tripping in Lim occurs based on Vin1 and the hysteresis, not based on whether the temperature reaches some threshold or not.

With regard to Applicant's arguments regarding the rejection of Claim 13 and 20 based on Lim, the Advisory Action states, "whether the temperature variation is significant or insignificant is dependent on perspective and broadly interpreted it does vary with respect to temperature." Firstly, the resistor R11 could have a zero temperature coefficient (TC), in which case Vin2 does not change based on temperature; it only changes based on Vin1. Further, Claim 13 recites, "activating hysteresis if a temperature-sensing condition has occurred." If a change occurs in Vin2, that change is more likely to be based on a change in Vin1 rather than a change in temperature. Even if resistor R11 does have a temperature coefficient, any changes in Vin2 based on temperature are insignificant compared to changes in Vin2 caused by changes in Vin1. Also, the hystereis is based on whether Vin1 is low or high, not based on a temperature-sensing condition. Hysteresis would occur even if the temperature remained unchanged.

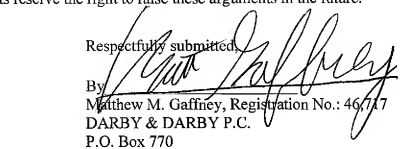
With regard to the rejection of Claims 13 and 20 based on Lim for the recitation of Claim 13, "ensuring that the hysteresis is automatically inactive when the circuit is powering up", the Office Action states, "With respect to ensuring the hysterisis [sic] because no signal passes to the hysteresis circuit until the power up the condition is met". However, Claim 13 does not state, "ensuring that the hysteresis is automatically inactive **before** the circuit is powering up". Rather, it states, "ensuring that the hysteresis is automatically inactive **when** the circuit is powering up". Clearly, before any power is applied at all, no signal passes. But while the circuit of Lim is powering up, a signal is passed. The circuit of Lim ensures a constant threshold for hysteresis. However, the circuit of Lim does not disable hysteresis until after power-up.

CONCLUSION

It is respectfully submitted that each of the presently pending claims (Claims 1-30) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact the Applicants' representative at the below-listed telephone number if it is believed that the prosecution of this application may be assisted thereby. Although only certain arguments regarding patentability are set forth herein, there may be other arguments and reasons why the claimed invention is patentable. Applicants reserve the right to raise these arguments in the future.

Dated: August 5, 2008

Respectfully submitted,



By
Matthew M. Gaffney, Registration No.: 46,717
DARBY & DARBY P.C.
P.O. Box 770
Church Street Station
New York, New York 10008-0770
(206) 262-8910
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant